

REMARKS

The Official Action dated October 17, 2006 and the references cited therein have been reviewed and this application has been amended as believed appropriate.

The examiner's suggested corrections to the specification have been made. The suggested improvements are appreciated.

Concerning the outstanding rejection of claims 2 and 11 based on 35 U.S.C. § 112, the above amendments to claims 1, 2, and 11 are believed to overcome these. The term "aqueous" has been deleted from claim 1, and it has been made clear in claim 2 that the solvent now called for in claim 1 can be a liquid, gel, foam or paste. This no longer broadens the limitations of claim 1. As for the method claim 11, the several steps now recited are believed to meet the requirements for actual steps practiced in using the measuring electrode of the invention. A number of further clarifying amendments have been made to the claims as will be apparent.

Claims 1-4 stand rejected over the Vaughan et al. U.S. patent No. 4,559,950 under 35 U.S.C. § 102. This rejection is respectfully traversed.

The present invention provides for an electrode constructed and arranged to provide consistent electrical connection between the electrode and a subject during a long electroimpedance tomography procedure or among a series of such procedures. This is accomplished by an electrode arrangement having a storage space containing a resistance reducing contact medium containing ions in solution in combination with an electrode that is at least partially permeable to the contact medium while impermeable to a solvent of the solution.

Claim 1 calls for "the contact medium containing ions in a solvent in solution" and "wherein the ions can penetrate through the measuring electrode," but the "measuring electrode is impermeable for the solvent." This is not the case with the Vaughan et al. patent structure.

The Vaughan patent provides in an electrode a slit 46 in an electrically conductive strip 28 to allow additional conductive gel to be squeezed through the slit to the skin area. See col. 4, lines 3 - 7. The strip 28 is not said to be at least partially permeable to the gel or permeable to ions in the gel. If it were, no slit 46 would need be provided. In fact a preferred constriction of the conductive strip 28 is a "conductive chemical composition 30 applied to a flexible plastic support band 29" That plastic band is "a sheet of MYLAR polyester" Col. 3, lines 45 - 51. The purpose of Vaughan et al. is not to assure consistency of electrical contact throughout a procedure or from one procedure to another, but rather to assure good electrical contact on occasions when needed. The example is given of a thick layer of hair interfering with the electrical contact. Col. 4, line 64 - col. 5, line 13.

New dependent claim 12, it should be noted, is dependent from claim 1 and is patentable by its dependency, but also further emphasizes the difference of the present invention from Vaughan et al. in that it calls for the at least partially permeable electrode to be "imperforate in a region extending across the storage space."

Claims 2-4 are patentable over the Vaughan et al. patent by virtue of their dependency from claim 1.

Claims 5-10 stand rejected as unpatentable over the Vaughan et al. patent in view of Kroll et al. U.S. patent No. 4,763,660 under U.S.C. § 103(a). Claims 5-10 also stand rejected as unpatentable over the Vaughan et al. patent in view of Gadsby et al. U.S. patent No. 5,341,806. It is respectfully urged that these rejections should now be withdrawn and these claims allowed. The Kroll et al. and Gadsby et al. patents are cited in the outstanding Official Action for their descriptions relating to the electric shield provisions of electrodes. Neither of the Vaughan et al. and Gadsby et al. patents teach the "at least partially permeable" measuring electrode through

which ions "can penetrate" as is called for in claim 1. Because of their dependencies, claims 5-10 incorporate the features of claim 1 that patentably distinguish claim 1 from the Vaughan et al. patent. Inasmuch as these features are not taught or suggested by either of the Kroll et al. and Gadsby et al. patents, claims 5-10 should now be allowed.

Newly presented independent claim 13 is directed to a measuring electrode arrangement having a "the measuring electrode being at least partially permeable for the conductive contact medium contained in the storage space so as to assure continuing reduced resistance electrical contact between the measuring electrode and the measurement object." This claim is believed patentable over all of the art of record.

Applicant wishes to advise the examiner that the applicant's corresponding European patent application that claims priority from the same PCT application as this U.S. application has been issued by the European Patent Office as a patent with claims similar in scope to claims 1-11 of this application. A copy of the issued European patent is enclosed.

For each of the foregoing reasons, all claims now present in this application are now in condition for allowance it is urged and early, favorable reconsideration to that end is requested.

Applicant requests a two month extension of time for response to the outstanding Official Action through and including March 17, 2007. A check in the amount of \$810 covering the \$450 fee for the extension of time and the \$360 fee for the multiple dependency of claim 11 as amended is enclosed. No further fee is believed required, however, authorization is given to charge any additional fees associated with this communication to Deposit Account No. 07012554. A duplicate copy of this sheet is enclosed.

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Any questions or suggestions regarding the application or the amended claims submitted herewith should be directed to the undersigned attorneys for applicant at the telephone number listed below or by email to the email address listed below.

Respectfully submitted,

GALLAGHER & KENNEDY, P.A.

A handwritten signature in black ink, appearing to read 'T D MacBlain', written in a cursive style.

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